

Cognition, heuristics, and biases behind environment-related behaviours

We read with great interest Matthieu Guitton and Julien Poitras' Comment¹ published in *The Lancet Planetary Health*, and we would like to reinforce the importance of environmental education for health professionals. Particularly, some health disciplines—such as Psychology, which is often neglected in this field—might have a cardinal role in environmental protection because they can help to support the delicate and long process of changing people's attitudes and behaviours for the protection of the environment they live in. We agree that environmental control has to be taken more seriously by governmental leaders. However, we think that society must be encouraged and inspired to understand environmental changes as well as to act proactively to safeguard the environment.²

Evidence suggests that technical and industrial practices and governmental policies are inadequate in supporting environmental control. To avoid these inadequacies, practices and policies have to take into consideration people's behaviours.

Surely, directives have to go hand-in-hand with people's behaviours.

People have to be taught how to infer and react to often confounding technical, governmental, and public information. Psychology is attentive, through its careful scientific research on behaviour, and might assist individuals in processing and responding effectively to the information about inherent multifaceted environmental challenges, such as the safeguard of the environment in which individuals live in.³

Yet even with appropriate knowledge about how to protect the environment and a professed intention to do so, many people still do not behave in a coherent way toward environment protection. There is often a substantial difference between peoples' self-reported knowledge, beliefs, thoughts, and intents, as well as their observable behaviour.⁴⁻⁵ Why does this difference exist? By drawing on important insights from psychology, particularly from cognitive psychology; an understanding of the key cognitive processes—such as biases, heuristics, and motivational factors—might help explain why environment-related behaviour is frequently discordant between personal beliefs and people's intentions. The understanding of these psychological mechanisms can help design more cost-effective and successful interventions to encourage more appropriate behaviours among people.

Acknowledgement

The authors acknowledge the support of the 'Psychology in Construction' (www.psycon.info) and 'Smart, Sustainable, safe and healthy cities' groups of the University of Wolverhampton.

The authors do not have any competing interests.

*Silvia Riva, Ezekiel Chinyio, Paul Hampton

Corresponding author:

s.riva@wlv.ac.uk

Faculty of Science and Engineering, University of Wolverhampton, Wulfruna St, Wolverhampton WV1 1SB, UK.

References

- 1 Guitton MJ, Poitras J. Acquiring an operative sustainability expertise for health professionals. *Lancet Planet Health* 2017; 1: e299–300.
- 2 Weber E. Doing the right thing willingly: behavioral decision theory and environmental policy. In: Shafir E, ed. *The behavioural foundations of policy*. Princeton: Princeton University Press, 2013.
- 3 Krantz DH, Peterson N, Arora P, Milch K, Orlove B. Individual values and social goals in environmental decision making. In: Kugler T, Smith JC, Connolly T, Son Y-J, eds. *Decision modeling and behavior in complex and uncertain environments*. New York: Springer-Verlag New York, 2008: 165–98.
- 4 Wester J, Timpano KR, Çek D, Lieberman D, Fieldstone SC, Broad K. Psychological and social factors associated with wastewater reuse emotional discomfort. *J Environ Psychol*
- 5 Baldi PL, Iannello P, Riva S, Antonietti A. Cognitive reflection and socially biased decisions. *Studia Psychologica* 2013; 55: 265.